



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/353,707	07/14/1999	ICHIRO HAMADA	SONYJP-3.0-077	3981

530 7590 06/29/2004

LERNER, DAVID, LITTENBERG,
KRUMHOLZ & MENTLIK
600 SOUTH AVENUE WEST
WESTFIELD, NJ 07090

EXAMINER

TRAN, THAI Q

ART UNIT	PAPER NUMBER
----------	--------------

2615

DATE MAILED: 06/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/353,707

Applicant(s)

HAMADA ET AL.

Examiner

Thai Tran

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 58-111 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 58-111 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 July 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed April 08, 2004 have been fully considered but they are not persuasive.

In re pages 12-13, applicants argue that De Vos fails to disclose the claimed instruction unit since it does not send instructions to the **SMU** (the only disclosed "storage unit") to enter into a "download mode" for downloading the desired data signal from the multiplexed data signal.

In response, the examiner respectfully disagrees. De Vos discloses in col. 10, lines 30-36 that « FIG. 9 shows the configuration of an end device, here a set top box 40. **The set top box 40** may comprise a CPU 45, a RAM 46, a ROM 47 and an MPEG decoder 48. **CPU 45 controls operation of the set top box 40 according to programs stored in ROM 47 and RAM 46. Said programs** may be down-loaded from the system manager 60, a SMU 20 or a navigation device 30". From the above passage, it is clear that the set top box 40 of De Vos anticipates the claimed "storage unit" and the user can select set top box 40 to receive down-loaded programs. When the system manager 60, the SMU 20 or the navigation device 30 downloads programs to the set top box 40, the system manager 60, the SMU 20 or the navigation device 30 downloads programs to the set top box 40 sends download mode instructions to the selected storage unit (set top box 40) at least indicating that the selected storage unit should enter a ready-to-download mode for downloading the desired data signal (programs) from the multiplexed data signal (ATM Switch 1). Thus, De Vos does indeed

Art Unit: 2615

discloses the claimed “an instruction unit operable to send download mode instructions to a user-selectable storage unit at least indicating that the selected storage unit should enter a ready-to-download mode for downloading the desired data signal from the multiplexed data signal (the system manager 60, the SMU 20 or the navigation device 30).

In re page 14, applicants argue that Takahashi does not disclose a status determination unit or method of receiving download status information from the storage unit indicating whether the storage unit has entered into a download mode but, rather, Takahashi only learns from the DDMM (download data manager memory) whether there is sufficient space on the storage unit to store the file if it is sent.

In response, the examiner respectfully disagrees. As recognized by applicants, Takahashi teaches a size detecting means for detecting the size of the file stored in the database, measurement means to measure the remaining size of storage available on the data receiving device receiving the downloaded file, and inhibition means to prevent sending of the file when the remaining memory capacity of the data receiving device is insufficient. The measurement means of Takahashi for measuring the remaining size of storage available on the data receiving device receiving the downloaded file anticipates the claimed “a status determination unit operable to receive download status information from the selected storage unit indicating at least whether the storage unit has entered the ready-to-download mode” and the inhibition means of Takahashi for preventing sending of the file when the remaining memory capacity of the data receiving device is insufficient anticipates the claimed “a controller operable to permit the downloading of

Art Unit: 2615

the desired data signal from the demultiplexer to the storage unit as a function of the download status information". Thus, the combination of De Vos and Takahashi as proposed by examiner discloses all the claimed limitations.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 58-64, 66-72, 75-76, 86-88, 90-98, and 101-102 are rejected under 35 U.S.C. 103(a) as being unpatentable over De Vos (US 6,192,454 B1) in view of Takahashi et al (US 6,029,068) as set forth in paragraph #3 of the last Office Action.

Regarding claim 58, De Vos discloses an apparatus (Fig. 1) for receiving a multiplexed data signal, comprising:

a receiving unit (ATM interfaces 29 of Fig. 1A and ATM Switch 1 of Fig. 1B, col. 1, lines 52-64, col. 2, lines 47-67, and col. 5, lines 38-43) operable to accept the multiplexed data signal from a communication channel;

a demultiplexer (ATM Switch 1 of Fig. 1B, col. 2, lines 47-67) operable to extract a desired data signal from the multiplexed data signal; and

an instruction unit (the system manager 60 of Figs. 1B-1C, col. 5, lines 23-37 and col. 10, lines 30-44) operable to send download mode instructions to a user-selectable storage unit at least indicating that the selected storage unit should enter a ready-to-download mode for downloading the desired data signal from the multiplexed data signal. However, De Vos does not specifically disclose a status determination unit operable to receive download status information from the selected storage unit indicating at least whether the storage unit has entered the ready-to-download mode and a controller operable to permit the downloading of the desired data signal from the demultiplexer to the storage unit as a function of the download status information.

Takahashi et al teaches, in a data management system, a status determination unit (col. 40, lines 30-52) operable to receive download status information from the selected storage unit indicating at least whether the storage unit has entered the ready-to-download mode and a controller (col. 40, lines 30-52) operable to permit the downloading of the desired data signal to the storage unit as a function of the download status information in order to ensure accurately downloading control programs to the storage unit.

Art Unit: 2615

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the download data manager memory DDMM as taught by Takahashi et al into De Vos's system in order to ensure the accurately downloading control programs to the storage unit.

Regarding claim 59, the combination of De Vos and Takahashi et al as discussed in claim 58 above teaches the claimed wherein at least one of the receiving unit, the demultiplexer, the instruction unit, the status determination unit, and the controller are separately implemented (see ATM interfaces 29 of Fig. 1A, ATM Switch 1 of Fig. 1B, and the system manager 60 of Figs. 1B-1C, col. 1, lines 52-64, col. 2, lines 47-67, col. 5, lines 38-43, col. 5, lines 23-37 and col. 10, lines 30-44 of De Vos and col. 40, lines 30-52 of Takahashi et al).

Regarding claim 60, the combination of De Vos and Takahashi et al as discussed in claim 58 above discloses all the claimed limitations except for providing that at least two of the receiving unit, the demultiplexer, the instruction unit, the status determination unit, and the controller are integrally implemented.

It is well settled that it would have been obvious to one of ordinary skill in the art at the time of the invention to make integral or to make separable. See *In re Larson*, 144 USPQ 347 (CCPA 1965) and *Nerwin v. Erlichman*, 168 USPQ 177.

Regarding claim 61, Takahashi et al also teaches the claimed wherein the storage controls start and stop conditions for downloading independently of the controller (col. 40, lines 30-52).

Regarding claim 62, De Vos discloses the claimed wherein the instruction unit is operable to provide a wait instruction to the storage unit which indicates that the storage unit should be wait until a scheduled time is reached to download the desired data signal (col. 6, lines 46-49 and Fig. 2B).

Regarding claim 63, Takahashi et al teaches the claimed wherein the instruction unit is operable to provide a setup instruction to the storage unit which indicates that the storage unit should be transmit download status changes to the status determination unit during the downloading (col. 40, lines 30-52).

Regarding claim 64, Takahashi et al teaches the claimed wherein the controller permits release of the desired data signal to the storage unit such that the storage unit independently control a download start and a download stop by monitoring data start and data stop indicators within the desired data signal (col. 37, lines 28-44 and col. 40, lines 30-52).

Regarding claim 66, Takahashi et al teaches the claimed wherein the status determination unit is operable to request the downloading status information from the storage unit (col. 40, lines 30-52); and the control unit is operable to (i) compute downloading completion information from the downloading status information (col. 37, lines 28-44), and (ii) output the downloading completion information to a display unit (col. 37, lines 28-44).

Regarding claim 67, the combination of De Vos and Takahashi et al as discussed in claim 66 above discloses all the claimed limitations except for the claimed wherein

the status determination unit is operable to request the downloading status information on a periodic basis.

De Vos also discloses that movie can be transmitted on a periodic basis (from col. 7, line 57 to col. 8, line 10) so that the same movie can be provides to viewers plurality of times per day.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the capability of transmitting movie on a periodic basis as taught by De Vos into the combination of De Vos and Takahashi et al as discussed in claim 66 in order to make program available to the viewers plurality of times per day.

Regarding claim 68, Takahashi et al teaches the claimed wherein the downloading status information includes time data and the controller is operable to compare the time data with a total time value contained within the desired data signal to obtain the downloading completion information (col. 37, lines 28-44).

Regarding claim 69, Takahashi et al teaches the claimed wherein the downloading completion information represents at least one of: (i) a numerical percentage of downloading completion; and (ii) elapsed time in downloading (Fig. 53 and col. 37, lines 28-44).

Regarding claim 70, Takahashi et al teaches the claimed wherein the status determination unit is operable to receive an error signal from the storage unit indicating that at least one of a packet continuity error, a transport error, a checksum error, and an operational error has occurred (col. 40, lines 30-52); and the controller is operable to

Art Unit: 2615

output an error message to a display unit in response to the error signal (col. 40, lines 30-52).

Regarding claim 71, Takahashi et al teaches the claimed wherein the controller is operable to instruct the storage unit to retry the downloading of the desired data signal at a next scheduled time at which the desired data signal is available to download (col. 40, lines 30-52).

Regarding claim 72, Takahashi et al teaches the claimed wherein the controller is operable to (i) determine whether a download retry is possible in response to the error signal (col. 40, lines 30-52); and (ii) output a message to a display unit indicating that downloading cannot be accomplished when a download retry is not possible (col. 40, lines 30-52); and the instruction unit is operable to output a download mode instruction to the storage unit to terminal downloading when the controller determines that a download retry is not possible (col. 40, lines 30-52).

Regarding claim 75, Takahashi et al teaches the claimed wherein the instruction unit is operable to request, and the status determination unit is operable to receive, download readiness information from the storage unit, the download readiness information including at least one of (i) whether the storage unit is powered on; (ii) whether the storage medium is loaded in the storage unit; (iii) whether the storage medium is write protected; and (iv) whether the storage medium has requisite storage capacity to store the desired data signal (col. 40, lines 30-52).

Regarding claim 76, Takahashi et al teaches the claimed wherein the controller is operable to facilitate downloading of the desired data signal from the demultiplexer to one or more storage units (col. 10, lines 30-44).

Method claims 86-88 are rejected for the same reasons as discussed in the corresponding apparatus claims 58, 61, and 64 above.

Method claims 90-98 and 101-102 are rejected for the same reasons as discussed in the corresponding apparatus claims 62-63, 66-72 and 75-76 above.

4. Claims 65 and 89 are rejected under 35 U.S.C. 103(a) as being unpatentable over De Vos (US 6,192,454 B1) in view of Takahashi et al (US 6,029,068) as applied to claims 58, 63-64, and 86-88 above, and further in view of Sakuma (US 5,731,923) set forth in paragraph #4 of the last Office Action.

Regarding claim 65, the combination of De Vos and Takahashi et al as discussed in claim 64 above discloses all the claimed limitations except for providing wherein the desired data signal is in an ATRAC compressed format.

The capability of compressing data using ATRAC compressing method is disclosed in col. 5, lines 20-27 of Sakuma.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the ATRAC compressor as taught by Sakuma into De Vos's system in order to increase the storage capacity of the ROM and RAM of De Vos by compressing the inputted signal.

Method claim 89 is rejected for the same reasons as discussed in the corresponding apparatus claim 65 above.

Art Unit: 2615

5. Claims 73-74, 77-85, 99-100, and 103-111 are rejected under 35 U.S.C. 103(a) as being unpatentable over De Vos (US 6,192,454 B1) in view of Takahashi et al (US 6,029,068) as applied to claims 58, 76, 86, and 102 above, and further in view of Goldwasser et al (US 5,241,428) and Sakuma (US 5,731,923) as set forth in paragraph #5 of the last Office Action.

Regarding claim 73, the combination of De Vos and Takahashi et al as discussed in claim 58 above discloses all the claimed limitations except for providing wherein the instruction unit is operable to request that the storage unit record management data concerning the downloaded desired data signal when downloading is complete.

Goldwasser et al teaches that the term "random access memory" is commonly used to refer to a particular type of solid stage memory. The term as used herein includes such solid state devices, but as a consequence of the particular nature of the invention, such devices as magnetic or optical discs, which permit rapid access to essentially any portion of the stored records, are also included (col. 2, lines 14-21).

It would have been obvious to one of ordinary skill in the art at the time of the invention to replace the magnetic or optical discs as taught by Goldwasser et al with the RAM of De Vos in order to increase the storage capacity of De Vos because magnetic or optical discs have higher capacity than conventional RAM or since it merely amounts to selecting an alternative equivalent RAM.

Sakuma teaches an optical disc (mini-disk, col. 1, lines 16-21) having UTOC for storing index information of addresses of the track (col. 5, lines 35-45) and the UTOC is

Art Unit: 2615

updated when signal recorded on the disk is changed (col. 8, lines 5-6 and col. 10, lines 60-61).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the mini-disc recording and reproducing apparatus as taught in Sakuma into De Vos's system in order to increase the storage capacity of De Vos by providing additional recording media, to perform continuous recording and reproducing over two or more media, and to prevent an erroneous operation such as an erroneous editing of data recorded over plural optical media.

Regarding claim 74, Sakuma teaches the claimed wherein the management data includes at least one of U-TOC data, AUX-TOC data, and AUX data obtained from the desired data signal (col. 8, lines 5-6 and col. 10, lines 60-61).

Regarding claim 77, Sakuma also teaches that the new storage unit is registered when it is connected to the apparatus (col. 5, lines 59-65).

Regarding claim 78, Sakuma also teaches the claimed wherein the instruction unit is operable to request identification information from the new storage unit (col. 5, lines 59-65) and the controller is operable to store the identification information received from the new storage unit (col. 5, lines 59-65).

Regarding claim 79, Sakuma additionally teaches the claimed wherein the instruction unit is further operable to request, and the controller is operable to: (i) receive storage unit information from the storage unit, including storage unit type, detailed type, and ATRAC compression capability (col. 5, lines 46-58); and (ii) store the requested information (col. 5, lines 59-65).

Art Unit: 2615

Regarding claim 80, Sakuma teaches the claimed wherein the storage unit type information includes at least one of an analog VCR type, a digital VCR type, a DV type, a D-VHS type, and MD recorder type, a CD recorder type, a DVD recorder type, and a hard disc drive type (col. 5, lines 35-45).

Regarding claim 81, Sakuma teaches the claimed wherein the detailed type information includes at least one of an analog VCR indication, an MD recorder indication, and a DVD recorder indication (col. 5, lines 35-45).

Regarding claim 82, Sakuma teaches the claimed wherein the controller is operable to perform at least one function selected from (i) assigning the new storage unit a name by default; and (ii) assigned the new storage unit the name in accordance with a user instruction (col. 5, lines 59-65).

Regarding claim 83, Sakuma teaches the claimed wherein the controller is operable to prompt a user to select at least one of the one or more storage units into which the desired data signal is to be downloaded by selecting the name of the storage unit (col. 7, lines 27-34).

Regarding claim 84, Sakuma teaches the claimed wherein the controller is operable to prompt a user to select at least one of the one or more storage units into which the desired data signal is to be downloaded (col. 7, lines 27-34).

Regarding claim 85, Sakuma teaches the claimed wherein the controller is operable to register that a storage unit has been disconnected from the apparatus (col. 6, lines 31-39).

Method claims 99-100 and 103-111 are rejected for the same reasons as discussed in the corresponding apparatus claims 73-74 and 77-85 above.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

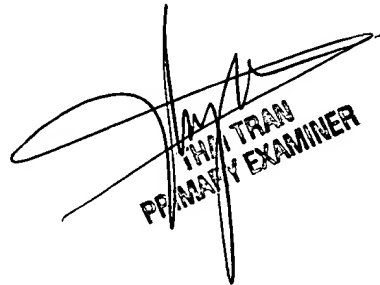
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai Tran whose telephone number is (703) 305-4725. The examiner can normally be reached on Mon. to Friday, 8:00 AM to 5:30 PM.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTQ


TRAN
PRIMARY EXAMINER